

B3
1 15. (Once Amended) The coil of claim 14, wherein the cross-sectional area of the
2 segments that define the inactive leg portion is smaller than the cross-sectional area of the
3 remaining segments that define the first and second active leg portions.

B4
1 17. (Once Amended) The coil of claim 16, wherein the cross-sectional area of the
2 segments that define the inactive leg portion is smaller than the cross-sectional area of the
3 remaining segments that define the first and second active leg portions.

B5
1 25. (Once Amended) The coil of claim 6, with the first and second active leg portions
2 curving inward of the band, and the inactive leg portion curving outward of the band.

1 26. (Once Amended) The coil of claim 16, with the first and second active leg portions
2 curving inward of the band, and the inactive leg portion curving outward of the band.

~~Cancel claims 21-24 and 27-30.~~

Add the following claims:

1 31. A voice coil for driving an actuator arm to various positions over a disk of a disk
2 drive, the voice coil comprising:

3 a spiral winding of conductive material defining a band with a generally triangular shape
4 having an open center, wherein the spiral winding includes:

5 a first active leg portion that curves inwardly of the band;

B6
6 a second active leg portion that curves inwardly of the band;

7 an inactive leg portion;

8 a first curved corner portion connecting the first and second active leg portions;

9 a second curved corner portion connecting the first active leg portion and the
10 inactive leg portion; and

11 a third curved corner portion connecting the second leg portion and the inactive
12 leg portion.

- 1 32. The voice coil of claim 31, wherein the spiral winding is a planar coil.
- 1 33. The voice coil of claim 31, wherein the spiral winding is a single-layer coil.
- 1 34. The voice coil of claim 31, wherein the spiral winding is a planar single-layer coil.
- 1 35. The voice coil of claim 31, wherein the spacing between each loop of the spiral
2 winding remains substantially the same throughout the spiral winding.
- 1 36. The voice coil of claim 31, wherein the height of the spiral winding remains
2 substantially the same throughout the spiral winding.
- 1 37. The voice coil of claim 31, wherein the spacing between each loop of the spiral
2 winding remains substantially the same throughout the spiral winding, and the height of the
3 spiral winding remains substantially the same throughout the spiral winding.
- 1 38. The voice coil of claim 31, wherein a width of spiral winding segments defining
2 the inactive leg portion is substantially smaller than a width of spiral winding segments defining
3 the first and second active leg portions.
- 1 39. The voice coil of claim 38, wherein a width of spiral winding segments defining
2 the first active leg portion is the same as a width of spiral winding segments defining the second
3 active leg portion.
- 1 40. The voice coil of claim 31, wherein a cross-sectional area of spiral winding
2 segments defining the inactive leg portion is substantially smaller than a cross-sectional area of
3 spiral winding segments defining the first and second active leg portions.

1 41. The voice coil of claim 40, wherein a cross-sectional area of spiral winding
2 segments defining the first active leg portion is the same as a cross-sectional area of spiral
3 winding segments defining the second active leg portion.

1 42. The voice coil of claim 31, further comprising a top insulative layer and a bottom
2 insulative layer, wherein the spiral winding is sandwiched between the top and bottom insulative
3 layers.

1 43. The voice coil of claim 42, wherein the top and bottom insulative layers are
2 polyimide and the spiral winding is copper.

1 44. The voice coil of claim 42, wherein the top insulative layer is secured to the spiral
2 winding by an adhesive.

1 45. The voice coil of claim 42, wherein the bottom insulative layer is secured to the
2 spiral winding by an adhesive.

1 46. The voice coil of claim 42, wherein the top and bottom insulative layers are
2 secured to the spiral winding by adhesives.

1 47. A voice coil for driving an actuator arm to various positions over a disk of a disk
2 drive, the voice coil comprising:

3 a spiral winding of conductive material defining a flat band with a generally triangular
4 shape having an open center, wherein the spiral winding is adapted to interact with the magnetic
5 field of permanent magnets of the disk drive, and the spiral winding is a continuous planar
6 single-layer coil that includes:

7 a first active leg portion that curves inwardly of the band;

8 a second active leg portion that curves inwardly of the band;

9 an inactive leg portion;

10 a first curved corner portion connecting the first and second active leg portions;

11 a second curved corner portion connecting the first active leg portion and the
12 inactive leg portion; and
13 a third curved corner portion connecting the second leg portion and the inactive
14 leg portion.

1 48. The voice coil of claim 47, wherein the spacing between each loop of the spiral
2 winding remains substantially the same throughout the spiral winding, and the height of the
3 spiral winding remains substantially the same throughout the spiral winding.

1 49. The voice coil of claim 47, wherein a cross-sectional area of spiral winding
2 segments defining the inactive leg portion is substantially smaller than a cross-sectional area of
3 spiral winding segments defining the first and second active leg portions, and a cross-sectional
4 area of spiral winding segments defining the first active leg portion is the same as a cross-
5 sectional area of spiral winding segments defining the second active leg portion.

1 50. The voice coil of claim 47, further comprising a top insulative layer and a bottom
2 insulative layer, wherein the spiral winding is sandwiched between the top and bottom insulative
3 layers and secured to the top and bottom insulative layers by adhesives.

1 51. A voice coil for driving an actuator arm to various positions over a disk of a disk
2 drive, the voice coil comprising:

3 a spiral winding of conductive material defining a band with a generally triangular shape
4 having an open center, wherein the spiral winding includes:

5 a first active leg portion defined by segments having a first cross-sectional area;

6 a second active leg portion defined by segments having a second cross-sectional
7 area;

8 an inactive leg portion defined by segments having a third cross-sectional area,
9 wherein the third cross-sectional area is smaller than the first cross-sectional area, and the third
10 cross-sectional area is smaller than the second cross-sectional area;

11 a first curved corner portion connecting the first and second active leg portions;

12 a second curved corner portion connecting the first active leg portion and the
13 inactive leg portion; and
14 a third curved corner portion connecting the second leg portion and the inactive
15 leg portion.

1 52. The voice coil of claim 51, wherein the spiral winding is a planar coil.

1 53. The voice coil of claim 51, wherein the spiral winding is a single-layer coil.

1 54. The voice coil of claim 51, wherein the spiral winding is a planar single-layer coil.

1 55. The voice coil of claim 51, wherein the spacing between each loop of the spiral
2 winding remains substantially the same throughout the spiral winding.

1 56. The voice coil of claim 51, wherein the height of the spiral winding remains
2 substantially the same throughout the spiral winding.

1 57. The voice coil of claim 51, wherein the spacing between each loop of the spiral
2 winding remains substantially the same throughout the spiral winding, and the height of the
3 spiral winding remains substantially the same throughout the spiral winding.

1 58. The voice coil of claim 51, wherein a width of the segments defining the inactive
2 leg portion is substantially smaller than a width of the segments defining the first and second
3 active leg portions.

1 59. The voice coil of claim 58, wherein a width of the segments defining the first
2 active leg portion is the same as a width of the segments defining the second active leg portion.

1 60. The voice coil of claim 51, wherein the cross-sectional area of the segments
2 defining the inactive leg portion is substantially smaller than the cross-sectional area of the
3 segments defining the first and second active leg portions.

1 61. The voice coil of claim 60, wherein the cross-sectional area of the segments
2 defining the first active leg portion is the same as the cross-sectional area of the segments
3 defining the second active leg portion.

1 62. The voice coil of claim 51, further comprising a top insulative layer and a bottom
2 insulative layer, wherein the spiral winding is sandwiched between the top and bottom insulative
3 layers.

136
Cont
1 63. The voice coil of claim 62, wherein the top and bottom insulative layers are
2 polyimide and the spiral winding is copper.

1 64. The voice coil of claim 62, wherein the top insulative layer is secured to the spiral
2 winding by an adhesive.

1 65. The voice coil of claim 62, wherein the bottom insulative layer is secured to the
2 spiral winding by an adhesive.

1 66. The voice coil of claim 62, wherein the top and bottom insulative layers are
2 secured to the spiral winding by adhesives.

1 67. A voice coil for driving an actuator arm to various positions over a disk of a disk
2 drive, the voice coil comprising:

3 a spiral winding of conductive material defining a flat band with a generally triangular
4 shape having an open center, wherein the spiral winding is adapted to interact with the magnetic
5 field of permanent magnets of the disk drive, and the spiral winding is a continuous planar
6 single-layer coil that includes:

7 a first active leg portion defined by segments having a first cross-sectional area;
8 a second active leg portion defined by segments having a second cross-sectional
9 area;

10 an inactive leg portion defined by segments having a third cross-sectional area,
11 wherein the third cross-sectional area is smaller than the first cross-sectional area, and the third
12 cross-sectional area is smaller than the second cross-sectional area;

13 a first curved corner portion connecting the first and second active leg portions;

14 a second curved corner portion connecting the first active leg portion and the
15 inactive leg portion; and

16 a third curved corner portion connecting the second leg portion and the inactive
17 leg portion.

1 68. The voice coil of claim 67, wherein the spacing between each loop of the spiral
2 winding remains substantially the same throughout the spiral winding, and the height of the
3 spiral winding remains substantially the same throughout the spiral winding.

1 69. The voice coil of claim 67, wherein the cross-sectional area of the segments
2 defining the inactive leg portion is substantially smaller than the cross-sectional area of the
3 segments defining the first and second active leg portions, and a cross-sectional area of the
4 segments defining the first active leg portion is the same as a cross-sectional area of the segments
5 defining the second active leg portion.

1 70. The voice coil of claim 67, further comprising a top insulative layer and a bottom
2 insulative layer, wherein the spiral winding is sandwiched between the top and bottom insulative
3 layers and secured to the top and bottom insulative layers by adhesives.